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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/614,164	07/08/2003	Fu-Yu Hsu	MR1679-243	6495
4586	7590	09/01/2006	EXAMINER	
ROSENBERG, KLEIN & LEE 3458 ELLICOTT CENTER DRIVE-SUITE 101 ELLICOTT CITY, MD 21043			PHASGE, ARUN S	
			ART UNIT	PAPER NUMBER
			1753	
DATE MAILED: 09/01/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

1x

Office Action Summary	Application No.	Applicant(s)	
	10/614,164	HSU, FU-YU	
	Examiner	Art Unit	
	Arun S. Phasge	1753	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-7, 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang, U.S. Patent 6,135,838 in view of Takimoto Kazutoshi (Takimoto), Japanese Publication number 09-140782.

Wang discloses the claimed photocatalytic lamp comprising a lamp body and a photocatalyst covering surrounding said lamp body, wherein said photocatalyst

covering comprising a breathing base material and a photocatalyst in said breathing base material, said breathing material wrapped around said lamp would form respective buffer zones as recited in the claims (see abstract). The reference teaches the same types of breathing material (see col. 6, lines 42-54). The reference further teaches the use of the same types of photocatalyst (see col. 6, lines 13-41). The photocatalyst can be mixed in and coated on said breathing base material (See col. 6, line 42 to col. 7, line 35). The lam can be a lamp tube or bulb (see figures 3A-3C). The lamp body emits ultraviolet light, within the claimed range (see col. 4, lines 10-35).

The reference does not disclose the use of the breathing base material formed into a protruding shaped flow guide portion or that the protrusions are arranged in parallel. The Takimoto reference is cited to show that to form wavy or rugged areas of the optical catalyst allows the air to be in extended contact and deodorization can be efficiently performed (see machine translation of the Abstract). The reference further discloses the arrangement of the flow guides in a relatively parallel direction (see figures 9 and 10).

Consequently, the invention as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the

disclosure of the Wang patent with the teachings of the Takimoto reference, because the Takimoto reference teaches that the use of protruding surfaces having catalysts produce an improved results by allow extended contact between the air and the catalysts and that said protrusions allow the flow in a parallel direction.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wang and Takimoto as applied to claims above, and further in view of Sakai.

The Wang patent does not disclose that the UV lamp body is a light emitting diode (LED). The Sakai patent is cited to show that LEDs are conventionally used in the art to produce UV (see abstract and claim 3).

Accordingly, the invention as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the disclosure of the Wang patent to use other conventional UV sources, because the Sakai patent teaches that LEDs produce UV.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arun S. Phasge whose telephone number is

(571) 272-1345. The examiner can normally be reached on MONDAY-THURSDAY, 7:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam X. Nguyen can be reached on (571) 272-1342. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read 'Arun Phasge', with a large, stylized initial 'P'.

Arun S. Phasge

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Primary Examiner
Art Unit 1753

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